

Supplementary Text S5. Effects of root extracts on the horizontal gene transfer

The donor and recipient strains were cultured overnight in LB medium at 37 °C, and then collected by centrifugation at 5500 rpm for 5 min at 4 °C. The collected cells were washed three times with PBS (pH 7.4) and then resuspended in PBS to an OD₆₀₀ of 1.0. The resuspended donor and recipient bacteria were mixed (v/v = 1:1), and CUR, AG, and THY were added, respectively. The bacteria were shaken for 30 min at 250 rpm. The bacteria were then incubated at 37°C for transfer. After 16 h, the mixed bacteria were diluted with fresh LB medium and then inoculated into LB agar with antibiotics. The conjugative transfer frequency was calculated by dividing the number of bacteria grown on a medium with four kinds of antibiotics (including tetracycline, kanamycin, ampicillin, and rifampicin) by the number of bacteria grown on a medium with only rifampicin.

Additionally, after 16 h of incubation of donor and recipient bacteria, RNA was extracted using a bacterial RNA Extraction Kit (Sangon Biotech, China), followed immediately by reverse transcription into cDNA (TransGen Biotech, China). TOP Green qPCR Super Mix kit (TransGen Biotech, China) was used for RT-qPCR amplification. The relative expression of each gene was calculated using the formula ($Ct (2^{-\Delta\Delta Ct})$) with 16S rRNA as the reference quantification.